UNITED STATES PATENT AND TRADEMARK OFFICE

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09/679,623	10/05/2000	Maki Yukawa	2257-163P	8138

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EXAMINER
TRAN, KHANH C

ART UNIT	PAPER NUMBER
2631	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 July 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2,7 and 16* is/are rejected.

7)☒ Claim(s) *3-6 and 8-15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06/10/2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

1. The Request For Continued Examination (RCE) filed on 07/21/2005 has been entered. Claims 1-16 are pending in this Office action.

Response to Arguments

2. Applicant's arguments with respect to claims 1-2, 7 and 16 have been considered but are moot in view of the new ground(s) of rejection.

In response to Applicant's arguments on page 11-15, *Examiner's position* is that first of all, the previous Office action clearly states that the TS decoder unit 122 uses the packet identifier (PID) corresponding to the video and audio written in the program map table (PMT) to extract data information. As expressly taught in Sonoda et al. invention, in column 20, lines 5-30, see also figure 20, when *the reception control unit 130 judges that the PMT does not include a pre-selection control information (PCI) in step S2012*, the reception control unit 130 sends to the TS decoder unit 122 the PIDs corresponding to the "video" and "audio" written in the PMT, and instructs the TS decoder unit 122 to output the presentation data related to the PIDs to the A/V decoder unit 123, see also figure 1. The A/V decoder unit 123 decodes the A/V data input from the TS decoder unit 122, and outputs the decoded A/V data to the reproducing unit 124 at step S2022. In view the foregoing, the presentation data does not include the pre-selection in this case. Sonoda et al. further teaches when having received the pre-selection control information (PCI) from the reception control unit 130, the reception control unit 130 sends the PID to the TS decoder unit 122 to extract the program control information (PCI) corresponding

to the PID at step S2014. According to Sonoda et al. teachings as recited above, the

presentation data does or does not contain pre-selection information image. The Office

action does equate the TS decoder unit 122 and A/V decoder unit 123 shown in figure 1

to the claimed signal extraction means for the following reasons. As disclosed on page

14 line 15 via column 15 line 5, of the original disclosure, Applicant discloses the

DEMUX 12, on the basis of the signal extraction parameter, dismantles the packet form

in the packet stream for extracting a bit stream of the image data and a bit stream of the

sound data and outputting them to the image decoder 14 and sound decoder 15. In

view of that, one of ordinary skill in the art would have recognized the interchangeability

of the TS decoder unit 122 and A/V decoder unit 123 taught in Sonoda et al. for the

corresponding elements disclosed in the specification of the instant application.

Examiner's further position is that the reception-control unit 130 *judges* whether

the PMT includes a PCI at step S2012. When having judges the PMT includes a PCI,

the reception control unit 130 *sends the packet identifier (PID)* [Emphasis Added] to the

TS decoder unit 122 to *extract the PCI corresponding to the PID*. The foregoing

teachings are similar to the following portion of the original disclosure: on page 14 line

17-23, a controller serves as parameter set means for setting the program parameter

described in the information table in DEMUX 12 as signal extraction parameter ... The

program parameter is data including a PID for dismantling a packet form and obtaining

image data, sound data As recited above, according to Sonoda et al. teachings as

recited above, the presentation data does or does not contain pre-selection information

image. The reception control unit 130 _sends the packet identifier (PID)_ to the TS

decoder unit 122 to _extract the PCI corresponding to the PID_ when having judged that

the PMT includes PCI.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-2, 7, and 16 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Sonoda et al. U.S. Patent 6,557,171 B1 in view of Perkins et al. U.S.

Patent 5,859,660.

Regarding claims 1 and 16, illustrated in figure 1 is a digital broadcast receiving

apparatus 102 including:

-        a reception control unit 130 performing operation in accordance with the

control program. In column 19 lines 54-60, the reception control unit 130

judges whether a program map table (PMT) includes a pre-selection

control information (PCI). When having judges that the PMT includes a

PCI, the reception control unit 130 sends the packet identifiers (PID) to a

transport stream (TS) decoder unit 122. In light of the foregoing

disclosure, the reception control unit 130 performs function of the

parameter set means as claimed in the pending patent application. The

- PMT corresponds to the claimed information table as described in the original disclosure of the pending application. The PMT is included in the digital broadcast signal;

- in column 19 line 54 to column 20 line 25, the TS decoder unit 122 uses the PID corresponding to the video and audio written in the PMT, wherein the PID is specified by the reception control unit 130. When having judged the PMT includes a PCI, the reception control unit 130 sends the PID to the TS decoder unit 122 *to also extract* the PCI corresponding to the PID. The TS decoder unit 122 outputs the presentation data (with or without the PCI present) related to the PIDs to the A/V decoder unit 123, which decodes the A/V data input from the TS decoder unit 122. In light of the foregoing disclosure, the combination of TS decoder unit 122 and A/V decoder unit 123 performs function of the signal extraction means as claimed in the pending patent application;

- as stated above, the reception control unit 130 judges whether a program map table (PMT) includes a pre-selection control information (PCI). Sonoda et al. does not expressly disclose the reception control unit 130 detecting content change of in the information table as claimed in the pending patent application. In column 20 lines 1-30, because the reception control unit 130 judges that the PMT includes a PCI, it would have been obvious for one of ordinary skill in the art that presence of the PCI indicates the content change of the PMT as claimed in the pending

patent application. The step of judging whether the PMT includes a PCI

would correspond to the claimed detecting content change of information

table. The presence or absence of the PCI would correspond to the

claimed pre-determined criterion, which is claimed in claim 2 of the

pending application. When judging that the PMT includes a PCI, the

reception control unit 130 *sends the PID to the TS decoder unit 122*, and

instructs it to extract the *PCI corresponding to PID*. The aforementioned

disclosure would correspond to the claimed parameter set means

detecting the content change and setting the program parameter as

claimed the pending patent application.

Sonoda et al. does not disclose the program signal includes a PCR

(program clock reference) as claimed in the application claim.

In column 2 line 50 via column 3 line 5, Perkins et al. discusses that FIG.

1B shows the format of an exemplary adaptation field in an MPEG-2 transport

packet. The adaptation field may include a 42-bit program clock reference

(PCR), which represents the value of the system time clock (STC) for a given

program at the time when the PCR bits were inserted into the transport stream.

Each program may have a different STC and therefore transport packets carrying

elementary streams from different programs will generally have asynchronous

PCRs. *The PCR information is inserted into a transport packet during an*

encoding or multiplexing operation and is utilized in transport packet decoding to

initialize and maintain the decoder system clock. Synchronization of audio, video

and data streams within a given program is provided using the PCR information

as well as the PTSs and DTSs, which may be placed in the PES packet header.

Sonoda et al. and Perkins et al. teachings are in the same field of endeavor.

Because the PCR information is inserted into a transport packet during an

encoding or multiplexing operation and is utilized in transport packet decoding to

initialize and maintain the decoder system clock, it would have been obvious for

one of ordinary skill in the art at the time of the invention that the transport

stream, corresponding to the program signal, includes a program clock

reference. Motivation is that as discussed by Perkins et al., synchronization of

audio, video and data streams within a given program is provided using the PCR

information.

Regarding claim 2, Sonoda et al. does not expressly disclose the reception

control unit 130 monitoring the contents of the information table every pre-determined

time. As disclosed in column 19 lines 31-60, with the user input, the reception control

unit 130 deletes the contents of the system table storage unit 127, which stores the

PMT. Then, the reception control unit 130 performs the judging to determine if the PCI

is included in the PMT. In light of the foregoing disclosure, it would have been obvious

for one of ordinary skill in the art that the reception control unit 130 would perform

monitoring the PMT for every new user input. That step would correspond to the

claimed parameter set means monitoring the contents of the information table every

pre-determined time. As recited in claim 1, the presence or absence of the PCI

constitutes the claimed pre-determine criterion.

Regarding claim 7, figure 1 shows a broadcast route 103 between the transmitter

and receiver. The received digital broadcast signal is directly received from outside.

Allowable Subject Matter

4. Claims 3-6 and 8-15 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Khanh Tran whose telephone number is 571-272-3007.

The examiner can normally be reached on Monday - Friday from 08:00 AM - 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

KCT   *Khanh cong Tran*   08/05/2005

                        Examiner   KHANH   TRAN